

In re Application of CARON et al.
Application No. 09/504,531

Amendments to the Claims

1. - 10. (Cancelled)

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11. (Currently Amended) A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising: receiving a message in a queue, wherein the queue is associated with at least one trigger, each trigger comprises at least one rule and each rule comprises a condition and an action;

checking whether the a condition of the at least one a rule of associated with the a trigger associated with the queue is satisfied by the message; and, upon determining that the condition of the rule is satisfied by the message, performing the an action of associated with the rule.

12. (Currently Amended) The medium of claim 11, wherein performing the an action of associated with the rule comprises activating each of at least one module referenced by associated with the rule.

13. (Original) The medium of claim 12, wherein each module comprises one of: a software component; and, an executable program file.

14. (Currently Amended) The medium of claim 12, wherein activating each of at least one module referenced by associated with the rule comprises passing the message to the module.

15. (Currently Amended) The medium of claim 11, where the trigger has an enabled state and a disabled state, such that the condition of each of the at least one rule of associated with the trigger is checked for satisfaction by the message received in the queue only when the trigger is in the enabled state.

16. (Currently Amended) The medium of claim 11, wherein the at least

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one rule comprises a short-circuit rule, such that satisfaction by the message received in the queue of the condition of the rule causes checking for satisfaction of the condition of any non-checked rules of the at least one rule to stop.

17. (Currently Amended) The medium of claim 11, wherein the at least one rule comprises a destructive rule, such that satisfaction by the message received in the queue of the condition of the rule removes the message from the queue.

18. (Original) The medium of claim 11, wherein checking is performed in a serial manner.

19. (Original) The medium of claim 11, wherein checking is performed in a concurrent manner.

20. (Currently Amended) A transactional message system comprising:
at least one queue, each queue capable of receiving a plurality of messages;
a trigger store of at least one trigger, each trigger associated with a queue, having a state selected from one of an enabled state and a disabled state, and having associated therewith at least one rule, each rule having a condition and an action; and,
a trigger service designed to, upon receipt of a message in a queue, check the condition of each rule of each trigger associated with the queue that is in the enabled state for satisfaction by the message, such that the action of the rule is performed upon satisfaction of the condition of the rule by the message.

21. (Original) The system of claim 20, wherein the trigger store corresponds to a particular computer and references each of the at least one trigger within a trigger database.

22. (Original) The system of claim 20, wherein each of the at least one queue comprises data stored on a computer-readable medium.

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A1 23. (Original) The system of claim 20, wherein each of the at least one trigger store comprises data stored on a computer-readable medium.

24. (Original) The system of claim 20, wherein the trigger service comprises a computer program executed by a processor from a computer-readable medium.

25. (Original) The system of claim 20, further comprising a trigger manager designed to provide for creating, editing and deleting triggers in a visual, non-programming manner.

26. (Original) The system of claim 20, wherein the trigger store of the at least one trigger comprises a trigger store of a plurality of ordered triggers.

27. (Currently Amended) The system of claim 20, wherein the trigger service is further designed to perform the action associated with a rule by activating each of at least one module referenced by ~~associated with~~ the rule.

28. (Currently Amended) The system of claim 27, further comprising at least one module, such that the at least one module referenced by ~~associated with~~ the rule as activated by the trigger service are selected from the at least one module.

29. (Original) The system of claim 28, wherein each module comprises one of: a software component, and an executable program file.

30. (Currently Amended) The system of claim 28, wherein the trigger service is further designed to activate each of the at least one module referenced by ~~associated with~~ the rule such that the message to the module is passed to the module.

31. (Currently Amended) The system of claim 20, wherein the each of ~~each of~~ at least one of the rules comprises a short circuit rule, such that satisfaction by the message

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received in the queue of the condition of the rule causes the trigger service to stop checking for satisfaction of the condition of each of any non-checked rules.

32. (Currently Amended) The system of claim 20, wherein ~~the each of~~ at least one of the rules comprises a destructive rule, such that satisfaction by the message received in the queue of the condition of the rule removes the message from the queue.

33. (Original) The system of claim 20, wherein checking is performed in a serial manner.

34. (Original) The system of claim 20, wherein checking is performed in a concurrent manner.

35. (Original) The system of claim 20, wherein the system comprises at least one computer.

36. (Currently Amended) A computer for inclusion into a transactional message system comprising:

at least one queue, each queue capable of receiving a plurality of messages;

a trigger store of at least one trigger, each trigger associated with a queue, having a state selected from one of an enabled state and a disabled state, and having associated therewith at least one rule, each rule having a condition and an action; and,

means for, upon receipt of a message in a queue, checking the condition of each rule of each trigger associated with the queue that is in the enabled state for satisfaction by the message, and performing the action of the rule upon satisfaction of the condition of the rule by the message.

37. (Original) The computer of claim 36, wherein the trigger store references each of the at least one trigger within a trigger database.

38. (Original) The computer of claim 36, further comprising means for

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creating, editing and deleting triggers in a visual, non-programming manner.

39. (Original) The computer of claim 36, wherein the trigger store of the at least one trigger comprises a trigger store of a plurality of ordered triggers.

40. (Currently Amended) The computer of claim 36, wherein the means for checking and performing is further for performing the action of the at least one ~~associated with a rule~~ by activating each of at least one module referenced by ~~associated with the at least one~~ rule.

41. (Currently Amended) The computer of claim 40, further comprising at least one module, such that the at least one module referenced by ~~associated with the at least one~~ rule ~~service~~ are selected from the at least one module.

42. (Original) The computer of claim 40, wherein each module comprises one of: a software component, and an executable program file.

43. (Currently Amended) The computer of claim 40, wherein the means for checking and performing is further for activating each of the at least one module referenced by ~~associated with the at least one~~ rule such that the message ~~to the module~~ is passed to the module.

44. (Currently Amended) The computer of claim 36, wherein the each of at least one ~~of the~~ rules comprises a short circuit rule, such that satisfaction by the message received in the queue of the condition of the rule causes the means for checking and performing to stop checking for satisfaction of the condition of each of any non-checked rules.

45. (Currently Amended) The computer of claim 36, wherein the each of at least one ~~of the~~ rules comprises a destructive rule, such that satisfaction by the message received in the queue of the condition of the rule removes the message from the queue.

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A1 46. (Original) The computer of claim 36, wherein checking is performed in a serial manner.

47. (Original) The computer of claim 36, wherein checking is performed in a concurrent manner.

48. (New) A computer-implemented method performable within a transactional message system comprising:
receiving, as part of a transaction, a message in a queue, wherein the queue is associated with at least one trigger, wherein each trigger comprises at least one rule, and each rule comprises a condition and an action; and
for each rule of each trigger associated with the queue:
(a) checking if the message satisfies the condition of the rule; and
(b) if the message does satisfy the condition of the rule then performing the action of the rule.

A2 49. (New) The method of claim 48, wherein the action of the rule comprises at least one reference to a module, and wherein performing the action of the rule comprises activating each of the at least one module referenced by the action of the rule.

Sub B1 50. (New) The method of claim 49, wherein each referenced module comprises one of: a software component; and, an executable program file.

51. (New) The method of claim 49, wherein activating each of the at least one module referenced by the action of the rule comprises passing the message to each referenced module.

52. (New) The method of claim 48, wherein each trigger further comprises an enabled/disabled state, and the at least one rule of each trigger is checked

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only if the enabled/disable state of a same trigger is in an enabled state.

53. (New) The method of claim 48, wherein the at least one rule comprises a short circuit rule, and the action of the short circuit rule comprises stopping the checking of each non-checked rule of the at least one trigger.

54. (New) The method of claim 48, wherein the at least one rule comprises an ordered set of rules, the ordered set of rules are checked in order, the ordered set of rules comprises a short circuit rule, and the action of the short circuit rule comprises stopping the checking of any rules subsequent to the short circuit rule.

55. (New) The method of claim 48, wherein the at least one rule comprises a destructive rule, and the action of the destructive rule comprises removing the message from the queue.

56. (New) The method of claim 48, wherein the at least one rule comprises an ordered set of rules and the ordered set of rules are checked in order.

57. (New) The method of claim 48, wherein the at least one rule comprises a plurality of rules and each of the plurality of rules is checked concurrently.